DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022595 Address: 333 Burma Road **Date Inspected:** 15-Apr-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. Liu Hua Jie **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component: OBG** Segment

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 008830

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 13AE. The weld designations reviewed are as follows:

- 1. SEG3007AD-118, 120, 122, 124, 126, 128
- 2. SEG3007AD-130, 132, 134, 136, 138, 140

OBG Trail Assembly

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint OBW13A-016 located on Deck panel to Deck Panel of OBG Segment 13BW to OBG Segment 13CW. ZPMC Welders are identified as 067588 and 067609. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20634.

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SMAW welding of temporary attachment areas located on cross beam side edge plate and Side Plate of OBG Segment 13BW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2879.

SMAW welding of weld joint DP3133-001-020 located on Deck Panel Diaphragm to Longitudinal Diaphragm at panel point 120.5 of OBG Segment 13BW. ZPMC Welder is identified as 066019. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20528.

This QA inspector observed ABF personnel performed Ultrasonic Testing (UT) on Deck Panel to Deck Panel of OBG Segment 13BW to 13CW. See the attached picture.

This QA inspector observed ZPMC personnel performed Magnetic particle Testing (MT) on Bottom Plate and Side Plate RS stiffener to Floor Beam at panel point 122 cross beam side of OBG Segment 13BW.

Bay 14

This QA Inspector observed the following work in progress:

SMAW welding of weld joint SEG3020AQ-025 located on Side Plate to Anchor Plate at panel point 125 to 127 of OBG Segment 14W. ZPMC Welders are identified as 066361 and 045246. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-1G-(1F)-FCM-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2923.

SMAW welding of weld joint SEG3020X-007 located on Longitudinal Diaphragm to Anchor Plate at panel point 125 to 127 of OBG Segment 14W. ZPMC Welder is identified as 066261. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020L-015 located on Deck panel diaphragm to Anchor Plate at panel point 127 of OBG Segment 14W. ZPMC Welders are identified as 067275 and 045143. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

FCAW welding of weld joint SEG3020D-024 located on Deck panel diaphragm to Deck panel diaphragm at panel point 128.3 of OBG Segment 14W. ZPMC Welder is identified as 067888. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable

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contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Vibin	Quality Assurance Inspector
Reviewed By:	Patel, Hiranch	QA Reviewer